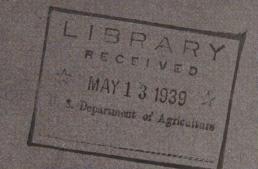
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# AN OUTLINE



# Solo OF THE WATER FACILITIES PROGRAM

U. S. DEPARTMENT AGRICULTURE CONSERVATION RVIC



A sharp-eyed camera sees the jeweled beauty of the dew upon the grass. On some favored ranges, this form of free moisture is sufficiently abundant to carry bands of sheep through an entire grazing season. More often, however, a meager moisture from reluctant skies must be cupped and carefully apportioned if western livestock is to have its needed drink.

#### RAINDROPS PUT TO WORK



N THE thirsty Plains raindrops patter down with the clink of pennies. And, again like pennies, they suggest an intelligent husbanding by the farmer and the rancher. Twelve, fifteen, even twenty inches is a none too robust annual precipitation. But if this meager moisture is cupped and thriftily apportioned, it is enough to provide an occasional drink to animals and crops, to help pay taxes, and to bolster living conditions.

In the arid and semiarid areas of the Western States it is not only the exacting rain gage which charts the course of agriculture. To a large degree it is the water table, the pump, the dam, and

the ditch.

Many a veteran of drought and dust needs only a dependable well, a stock pond, or a water-

spreading system to lick his problem of survival.

The Great Plains Committee described and dramatized this need. After studying the Committee's report, the President, the Congress, and the Secretary of Agriculture made available funds of \$5,500,000 for building, supervising, demonstrating, and direct lending. This Federal underwriting, together with technical assistance and numerous forms of practical cooperation, constitutes the pith and marrow of the Government's water facilities program.

This program is here briefly skeletonized.

#### WHAT IT PROVIDES



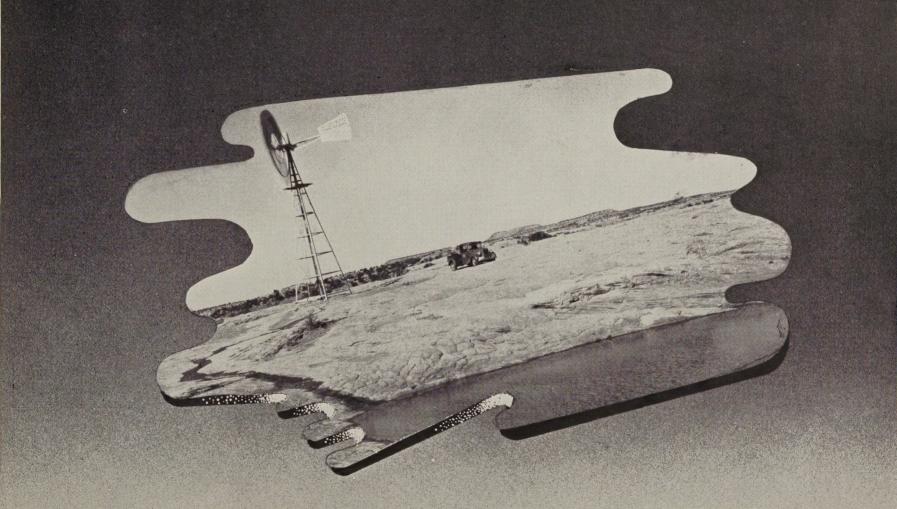


ACILITIES for storage or utilization of water for farm gardens, for crop and hay lands, for ranges and pastures, for stock, for other agricultural purposes. Specifically—

Ponds.
Reservoirs.
Wells (including repair).
Dams: Detention,
retention, diversion.
Pumps (including windmills).

Spring developments.
Water spreaders.
Stock water tanks.
Flood irrigation and small irrigation works.
Recharging of underground reservoirs.

8-12994



Water thrift is furthered by this sturdy windmill perched high on the Arizona landscape.

## WHERE IT APPLIES





#### ITHIN arid and semiarid areas of—

Arizona.
California.
Colorado.
Idaho.
Kansas.
Montana.
Nebraska.
New Mexico.
Nevada.

North Dakota.
Oklahoma.
Oregon.
South Dakota.
Texas.
Utah.
Washington.
Wyoming.

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A drinking cup for thirsty cattle, kept full but not overflowing by float-and-valve arrangement. The larger tank for quantity storage.

#### WHO MAY BENEFIT





ARMERS and ranchers, within selected areas, who need assistance and who agree—

- (1) To furnish acceptable amounts of labor and materials.
- (2) To practice sound management which will provide soil and water conservation, a subsistence for family and livestock, an income to cover living expenses, operating costs, and loan payments.

Facilities are available to landowners, tenants, and groups. Assistance may be given to a soil-conservation district, a cooperative association, a mutual water company, an irrigation district, or some other appropriate organization.

Priorities obtain where human distress is most acute and where water and land use may be improved on an efficient, low-cost basis.



Partial diversion and water-spreading structures in New Mexico. Rock percolators on the contour effect an even distribution.

#### INSTALLATION





CTUAL construction and installation of facilities can be handled either by—

- (1) Having the Department of Agriculture do the job; or by
- (2) Making the necessary funds available to the benefiting farmer or farmers who will do the job with the technical guidance of the Department and pay for materials and equipment.

Governing the choice are such considerations as the simplicity or complexity of the undertaking, together with the economy and expedition with which it can be carried through. 8-12994



A spring development in Colorado.

#### SIZE OF PROJECTS





MPHASIS is on "small." Top expenditure for any single project, \$50,000. Most projects, less than \$2,000.

The water facilities program is a cooperative one. Three agencies within the Department of Agriculture share the Federal responsibility.

The Bureau of Agricultural Economics does the general planning.

The Farm Security Administration handles the financial side, contributes farm and home management plans and counsel.

The Soil Conservation Service supervises construction, outlines soil and water conservation plans for individual farms, exercises leadership for the program as a whole.

Assisting in the planning process are county and community farm planning groups, land-grant colleges, State engineers, State agricultural advisory councils, and other local groups.



Shallow well, open-pit type.

#### REPAYMENT





ENEFITING farmers and ranchers will repay the cost of labor, equipment, materials, and supplies furnished by the Department, and funds advanced to them by the Department.

Repayment at 3-percent interest may extend for the life of the structure. In no instance do loans run for more than 20 years.

Principal and term of loan are scaled according to the beneficiaries' ability to pay.

Needed water facilities enhance farm and ranch values, classify as permanent improvements. Many times they serve to stabilize rural communities, help to insure desirable tenantry. Sometimes enabling the collection of taxes, they add a backlog for the support of schools, roads, and other social enterprises.



Wide-armed spreading structures holding the spring run-off on a Montana farm.

#### THREE PLANS FOR TENANTS



FORM of lease or lease-purchase contract between tenant and landowner, transferable, which protects the lessee's interest in his investment in water facilities. Provisions cover landowner's privilege to repurchase in event of default and threatened foreclosure; state a method for appraisal; stipulate an annual rental based on land value without facility; include payment of real-estate tax by tenant-borrower; and require assignment as security during period of loan.

OR

A lease for period of loan, an annually renewable lease, or a continuing lease. Provisions for reimbursement of tenant for any unexhausted residual value of facility remaining at a time of expiration or termination of lease.

OR

Assumption by landowner himself of responsibility for repayment of facility loan, for carrying out conservation plans and practices, for maintenance of facility, for any other obligations.



Underground storage is sought in this concrete weir across the porous bed of a California creek.

## FURTHER INFORMATION





URTHER information about the program may be obtained through—

(1) The county agricultural agent.

(2) The county rural-rehabilitation supervisor of the Farm Security Administration.

(3) The local representative of the Soil Conservation Service.

(4) The State coordinator of the Soil Conservation Service for your State.

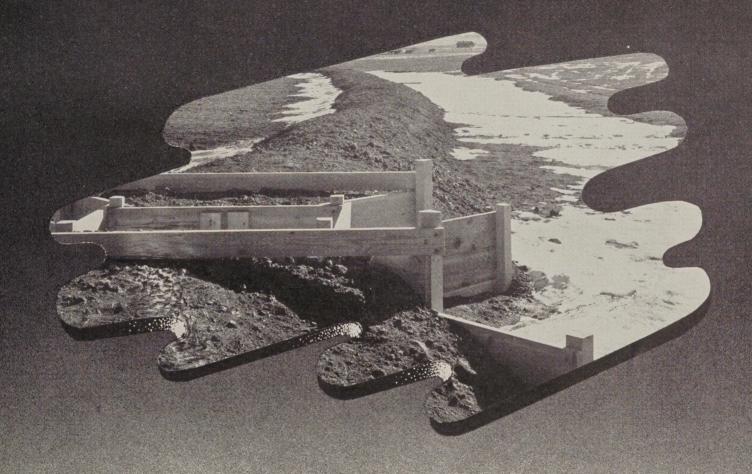
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Needed rainfall reposes in this riprapped earth vault. It is an Oklahoma farm pond in a contour-ridged pasture.

#### STATE COORDINATORS OF THE SOIL CONSERVATION SERVICE

Arizona	J. G. Lindley, acting	Safford, Ariz.
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Colorado	Kenneth W. Chalmers	Fort Collins, Colo.
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Wyoming	O. E. McConnell	Laramie, Wyo.



A farmer-built outlet gate through a water-spreading dike.

This, then, is the general framework of the water facilities program. It is a framework everywhere riveted to the central objective of human rehabilitation through better water and land use.

Clearly, the objective cannot be approached haphazardly. It cannot emerge from a scatter-shot spotting of projects on individual farms. Use of central water supplies must be carefully planned in order to serve the maximum possible number of farm families. Each pond, each well, each dam must be located to help a stricken agriculture back to vigor—not to encourage the cultivation of submarginal acres.

With funds definitely limited, every dollar is commissioned to do a prescribed task in a planned and orderly way. Every installation must be more than justified by the public or private benefits to be derived: Benefits to farm, to farm family, to entire community.

The program can best be understood when viewed in deep panorama—with each new water facility thrown against a background of probable benefits through many years to come.



Community irrigation for production of fruits and vegetables in a far western state.

